

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Philip S. Lyren (Registration number: 40,709) on 6/18/08, and Mr. Clare Hartnett (Registration Number: 35,185) on 6/19/08.

3. The claims have been amended as follows:
 1. (currently amended) A method comprising:

determining, by a first program, an attribute of a first functional unit by referencing a virtual memory address, the first functional unit comprising a first processor, a first page table, and a random access memory (RAM) coupled to the first processor in a computer system, and the first program executing in the first functional unit;

determining, by a second program, an attribute of a second functional unit by referencing the virtual memory address, the second functional unit comprising a second processor, a second page table, and a RAM coupled to the second processor in the computer system, and the second program executing in the second functional unit;

wherein the referencing the virtual memory address by the first program provides a pointer to an attribute stored in the RAM of the first functional unit, and wherein the referencing the virtual memory address by the second program provides a pointer to an attribute stored in the RAM of the second functional unit and the pointer and the attribute of the second functional unit are different than the pointer and attribute of the first functional unit; and wherein the first and second page tables each translate the virtual memory address to different physical addresses;

saving a replicated portion of an operating system program and the attribute of the first functional unit to a read-only portion of the RAM of the first functional unit; and

saving a replicated portion of an operating system program and the attribute of the second functional unit to a read-only portion of the RAM of the second functional unit, wherein the first and second page tables each translate a second virtual memory address to a same physical address.

2. – 3. (canceled)

4. (original) The method as defined in claim 1 wherein determining an attribute of a first functional unit further comprises determining low and high physical address of the RAM of the first functional unit.

5. (original) The method as defined in claim 1 wherein determining an attribute of a first functional unit further comprises determining a list of input/output devices local to the first functional unit.

6. (currently amended) A computer system comprising:

- a first processor coupled to a first random access memory (RAM), the first processor and first RAM forming a first resource affinity domain (RAD);
- a second processor coupled to a second RAM, the second processor and second RAM forming a second RAD, and wherein the second processor is coupled to the first processor;
- a RAD specific attribute of the first RAD along with a replicated portion of an operating system stored in the first RAM, wherein the replicated portion of the operating system, when executing in the first RAD, reads the RAD specific attribute of the first RAD by reference to a virtual memory address; and
- a RAD specific attribute of the second RAD along with a replicated portion of the operating system stored in the second RAM, wherein the replicated portion of the operating system, when executing in the second RAD, reads the RAD specific attribute of the second RAD by reference to the virtual memory address, wherein a first page table in the first RAD and a second page table in the second RAD each contain an entry corresponding to the virtual memory address, and the RAD specific attribute is a RAD identifier.

7. (canceled)

8. (original) The computer system as defined in claim 6 further comprising:

wherein the RAD specific attribute of the first RAD is a RAD identifier; and

wherein the operating system program stored in the first RAM, when executed by the first processor, determines the RAD within which the operating system program is executed by reading the RAD identifier from the first RAM.

9. (canceled).

10. (original) The computer system as defined in claim 6 wherein each replicated operating system program, when executed by the processors in its RAD, uses the RAD identifier to determine a local RAM for memory allocation.

11. (original) The computer system as defined in claim 6 wherein each replicated operating system program, when executed by the processor in its RAD, uses the RAD identifier for scheduling a program stored in local RAM.

12. (currently amended) Computer readable media comprising an executable program that, when executed, implements a method comprising:

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reading a functional unit identifier from a random access memory (RAM) coupled to a processor in which the program executes;

determining within which functional unit, identified by the functional unit identifier, the program is executing;

addressing data at a same virtual address by different processors in different functional units, wherein each processor in a different functional unit reads different data specific to its functional unit for the same virtual address; and

addressing data at a second same virtual address by the different processors in the different functional units, wherein the second same virtual address in each of the different functional units points to a same physical address, wherein the executable program further comprises scheduling a program to execute on the processor in the functional unit.

13. (original) The computer readable media as defined in claim 12 wherein the executable program further comprises allocating memory from RAM within the functional unit, identified by the functional unit identifier, to a program executing on the processor in the functional unit.

14-20. (canceled).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAMQUY TRUONG whose telephone number is (571)272-3773. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Camquy Truong

June 18, 2008
